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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,836	06/12/2001	Laurent F A Hennequin	P.278065	6411
9629	7590	05/19/2004	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			TRUONG, TAMTHOM NGO	
			ART UNIT	PAPER NUMBER
			1624	

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/806,836	<b>Applicant(s)</b> HENNEQUIN ET. AL.	
	<b>Examiner</b> Tamthom N. Truong	<b>Art Unit</b> 1624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on (RCE) 04-22-04.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-9,14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 10-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>04-22-04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04-22-04 has been entered.

Applicant's amendment of 04-22-04 has been fully considered. Applicant has pointed out the support for the proviso of "R<sup>2</sup> is not a hydrogen", and R<sup>2a</sup>. Therefore, the previous rejection of 112/1<sup>st</sup> paragraph is withdrawn herein.

Claims 2-4, and 15 have been cancelled, thus, only claims 1, 5-14, and 16-19 are pending.

An update search yields two references, which raises the following new ground of rejection.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5-9, 14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Myers et. al.** (US 6,645,969 B1).

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

On column 9, Myers et. al. list several compounds of which two compounds on lines 54 and 58 are analogous to those of formula (Ib) in claim 1, and formula (II) in claims 18, 5-9, 14, and 19 with the following substituents:

- Z<sub>b</sub> is -O-; and ring C is a 5-membered heterocyclic moiety (e.g. thiophene);
- R<sup>2a</sup> is alkoxy;

The disclosed compounds differ from the claimed compounds by having a halogen or methoxy as a substituent corresponding to the instant variable R<sup>1</sup>, and by having a methoxy group at the position corresponding to the instant variable R<sup>2</sup> (which has been excluded from claim 18).

However, on column 3 of US'969, the disclosed genus of formula I allows for other moieties as substituents on the quinazoline, such as: alkylthio, hydroxy, carboxy, and carbalkoxy, etc. (see the definition of R<sub>7</sub> which corresponds to the instant variable R<sup>2</sup>). Also, the

disclosed variable R (corresponding to the instant variable R<sup>1</sup>) represents moieties that overlap with those represented by the instant variable R<sup>1</sup> (e.g. hydrogen, alkyl, aryl, aralkyl, etc.). With such an equivalent teaching, one skilled in the art would have been motivated to select the claimed compounds since the general process for making such compounds is also described on columns 5 and 6 (which is analogous to the process (a) recited in the instant claim 19).

Regarding the “*method for producing an antiangiogenic and/or vascular permeability reducing effect*” of the instant claim 1, the teaching of Myers et. al. implicitly suggests it because the disclosed genus can inhibit cell proliferation, and treat atherosclerosis. It is known in the art that angiogenesis can also cause atherosclerosis by the abnormal growth of epithelial cells in vascular vessels. Thus, it is within the level of one skilled in the art to apply the compounds of Myers et. al. for producing an “*antiangiogenesis and/or vascular permeability reducing effect*”.

Thus, at the time of the invention, it would have been obvious to make the claimed quinazolinyl compounds of formulae (Ib) and (II) as well as applying them in a method for producing an “*antiangiogenesis and/or vascular permeability reducing effect*”, in view of the teaching of Myers et. al.

#### ***Claim Objections***

4. Claims 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Those claims recite compounds with substituents that are not suggested in the disclosed genus of formula I.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamthom N. Truong whose telephone number is 571-272-0676. The examiner can normally be reached on M-F (~10 am ~ 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mukund Shah can be reached at 571-272-0674. If you are unable to reach Dr. Shah within a 24 hour period, please contact James O. Wilson, Acting SPE of 1624, at 571-272-0661.

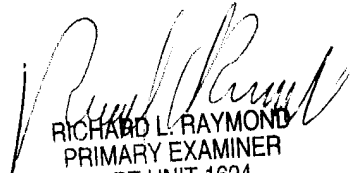
The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.



T. Truong

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May 13, 2004



RICHARD L. RAYMOND  
PRIMARY EXAMINER  
ART UNIT 1624